MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER **1, 2016/2017 SESSION**

TSO 7021 – Service Oriented Architecture Using Web Services

(All sections / Groups)

17 OCTOBER 2016
8.00 p.m - 10.00 p.m
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 5 pages only.

2. Attempt **FOUR** out of FIVE questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write your answers in the Answer Booklet provided.

Question 1

a) AirAsia is one of the leading airline company that has many agent or third party companies selling the airline tickets. Explain how AirAsia can transform its functionality into services based on Service Oriented Architecture so that the airline tickets can be programmed and integrated into various platforms. [4 marks]

b) What happen if we do not have WSDL and UDDI? Can we still call the functions? [3 marks]

c) Why it is difficult to extract information from HTML page? [1 mark]

d) Why do we need to have attributes in XML whereby all the data can be stored using elements? Provide an example to help justify your answer. [2 marks]

Continued.....

Question 2

Home
About
Search Twitter
TWEETS 15.9K
FOLLOWING 386
FOLLOWERS 1.09M
LIKES 43
LISTS 3
Tony Fernandes
@tonyfernandes
GCEO of AirAsia, Founder of Tune Group, Chairman of QPR , Chairman of Caterham Group.
UT: 3.134334,101.688174
1,516 Vine Loops
Joined December 2008
1,194 Photos and videos
Tweets
Tweets & replies
Media
Tony Fernandes @tonyfernandes · 2m
Your ideas & thoughts can usher a paradigm shift in how India prepares for... ln.is/kyy8t by @narendramodi via @c0nvey
Tony Fernandes Retweeted
Andy Sinton @AndySintonQPR · 1h
Good luck to @QPRLFC who begin their season today! #QPRLFC
Tony Fernandes Retweeted
QPR FC @QPRFC · 3h
Morning! How good does it feel to be heading into the international break after an away win? COYRS!

a) Write the DTD for the above website. [4 marks]

b) Write the XML Schema that is equivalent to the DTD in question 2(a). [4 marks]

c) Write one (1) XML document that conforms to the DTD in question 2(a). [2 marks]

Continued.....

Question 3

a) What happen if the SOAP request cannot be processed by the Service Provider? List down two possible causes. [3 marks]

b) Why do we need namespace in an XML document? How does namespace works? Why do we need to refer the prefix to URL value and what normally does the URL contains? [5 marks]

c) Why UDDI is less popular as compared to third party repository? [2 marks]

Question 4

a) What are the functions of XSLT? [2 marks]

b) Consider the following C# code.

```
[WebMethod]
public Hotel roomBooking(string roomType, float roomPrice, string[] description)
{
  // implementation omitted
}

public class Hotel {
    public string roomStatus;
    public int id;
    private string roomAvailability;
```

Continued.....

```
public string currentRoomStatus()
{
    return roomStatus;
}
}
```

Write the SOAP request for the above web method. [4 marks]

c) Write the SOAP response for the above web method. [4 marks]

Question 5

a) Consider the following C# code.

```
public class GlobalWeather
{
[WebMethod]
public string GetWeather(string CityName, string CountryName)
{
  //Implementation omitted
}
[WebMethod]
public string GetCitiesByCountry(string CountryName)
{
  //Implementation omitted
}
}
```

Continued.....

Write the <types> element of the WSDL that describes all the functions. [4 marks]

b) Refer to the C# code in Question 5. Write the <service> element that describes the class name, service location and port name. The service is located at http://www.webservicex.com/globalweather.asmx and the port name is GlobalWeatherSoap [3 marks]

c) How do the quality of service are measured? [3 marks]

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